UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|---|---|---|---|
| 10/521,870 | 01/21/2005 | Lea Rampton | H2316-00002 | 1259 |

41396 7590 03/17/2008

DUANE MORRIS LLP
IP DEPARTMENT
30 SOUTH 17TH STREET
PHILADELPHIA, PA 19103-4196

| EXAMINER | |
|---|---|
| NGUYEN, SON T | |
| ART UNIT | PAPER NUMBER |
| 3643 | |

| MAIL DATE | DELIVERY MODE |
|---|---|
| 03/17/2008 | PAPER |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/521,870 | RAMPTON ET AL. | |
| | Examiner | Art Unit | |
| | Son T. Nguyen | 3643 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *30 November 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1,2,5-8,12 and 32-34* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,5-8,12 and 32-34* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. **Claims 1,5-7,12,32-34** are rejected under 35 U.S.C. 102(b) as being anticipated by Rampton (WO 95/03371 on form PTO-1449).

For claim 1, Rampton discloses a method for production of organic plant growth media from sawmill waste, the process comprising the steps of introducing comminuted sawmill waste comprising particulate pine bark having a layer of exogenous bark adhering to endogenous bark (Rampton's bark waste is pine (see page 4, lines 1-6), and on page 7, Rampton stated that when they reach separation vessel 19, this is when the bark particles separate wherein the exogenous bark separates from the endogenous bark, hence, this indicate that the exogenous and endogenous has been adhered together until this point in the vessel 19) into an inlet (region around 11 of Fig. 2) of a conveyor mechanism 23 containing a body of heated water (page 6, lines 14-16) including a chemical treatment of pH modifier ("aqueous limestone suspension" of page 6 5th para.); submerging the sawmill waste in the body of the heated water for a predetermined period of time to kill microbes, insects, etc. (page 6, lines 19-32, especially lines 28-32, wherein the conveyor 23 serves to continuously agitate the bark particles to ensure complete and even chemical treatment in the vessel 12) whilst

transporting treated sawmill waste towards an outlet of said conveyor mechanism (submerging and transporting occur simultaneously in vessel 12) wherein at least partial separation between said endogenous bark and said exogenous bark is effected by the application to said sawmill waste by said conveyor system of mechanical shear forces whilst said sawmill waste is submerged (page 6, lines 33-37 and page 7, lines 1-5, some endogenous and exogenous barks will be separated and sink to the bottom of vessel 12 by action of conveyor 23, rotating cranks 24, link arms 25, bed 26, which are all considered mechanical shear forces agitating the bark particles in the vessel 12); and, at least partially dewatering the waste to a predetermined moisture content (page 7, 4th complete para.).

For claim 5, Rampton further disclose the exogenous and endogenous bark being partially separated during or subsequent the at least partial dewatering (from "shredder 31" of Fig. 2 and page 7 lines 36-37 of Rampton).

For claims 6 and 7, Rampton further discloses the water heated in the range of 85 to 125°C or 100 to 110°C ("at or near 100°C" of Rampton page 6, 4th para.).

For claim 12, Rampton as modified by Lebo further disclose the dewatering by mechanical pressure, rotary watering apparatus ("rotary screen dryer 31" of Fig. 2 and page 8, lines 3-6).

For claim 32, Rampton further discloses the waste at least partially dewatered adjacent an outlet port (31 of Fig. 2).

For claims 33-34, Rampton further discloses the dewatering by mechanical pressure, rotary watering apparatus ("rotary screen dryer 31" of Fig. 2 and page 8, lines 3-6).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. **Claim 2** is rejected under 35 U.S.C. 103(a) as being unpatentable over Rampton as applied to claim 1 above, and further in view of Lebo (3960718).

For claim 2, the limitations of claim 2 are disclosed as described above. Not disclosed is the sawmill waste mixed with up to 20% sewage. Lebo, however, discloses a mixture of sawmill waste ("wood shavings, sawdust, ground bark, wood chips or other such material" of col. 1 lines 53-60) with sewage sludge (c01. 1 lines 53-63). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method Rampton by adding sewage sludge as disclosed by Lebo so as to make the material useable as a soil conditioner (see Lebo at col. 1 lines 53-60) and to make the amount of mixed with up to 20% sludge depending upon use of the medium.

5. **Claim 8** is rejected under 35 U.S.C. 103(a) as being unpatentable over Rampton (as above).

The limitations of claim 1 are disclosed as described above. Rampton further discloses the particles sized at 6 to 30 mm before introduction into the conveyor system

(at page 4, lines 1-6 and page 6, line 4 "graded"). Not disclosed is the waste passing through a 12 mm screen. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method Rampton by having the waste passing through a 12 mm screen in order to assure that the material is uniform in size.

***Response to Arguments***

6. Applicant's arguments filed 11/30/07 have been fully considered but they are not persuasive.

**Applicant argued that Rampton does not teach the amended claim 1, defines the sawmill waste as comprising particulate pine bark having a layer of exogenous bark adhering to endogenous bark. Claim 1 has been limited further to emphasize that at least partial separation between the endogenous bark and the exogenous bark is effected by the application to the sawmill waste by the conveyor system of mechanical shear forces while the sawmill waste is submerged.**

Rampton's conveyor system does teach the amended claim 1. As explained in the rejection above, the exogenous and endogenous barks are adhered to each other at the beginning of the conveying process. When they enter the vessel 12, they are both separated and adhered together because part of the bark waste separates and sinks to the bottom of the vessel 12 (see page 6, lines 35-37, page 7, lines 1-5) and part of the bark waste adheres together and still float on the surface of the water until they reach vessel 19, where the endogenous and exogenous barks are separated (see page 7, lines 20-24). Thus, as called for in claim 1, the pine bark with exogenous bark adhering

to endogenous bark introduced into the conveyor system, to which some will separate and sink to the bottom of vessel 12 and some will still adhere at the surface of vessel 12 until they get to vessel 19, when they separate.

As for the at least partial separation argument, as mentioned, the part of the bark that sinks to the bottom of vessel 12 is separated from the rest of the bark by mechanical action of the conveyor 23 in vessel 12 (see page 6, lines 20-32). This conveyor 23 is the cause of partial break up of the bark sawmill waste to which some sink to the bottom of vessel 12 and some remain intact and float to the surface for separation later in vessel 19. Note that Applicant did acknowledge separation of particles sinking to the floor of vessel 12 on page 10 of the response filed 11/30/07. Applicant states that this is only a miniscule proportion as the primary separation between the exogenous and endogenous bark components occurs in separation vessel 19. It does not matter miniscule proportion or large proportion, the fact of the matter is that separation does occur in the vessel 12, hence, Rampton teaches the limitation as claimed.

As for the submerging argument, again, as mentioned above, page 6, lines 28-32 of Rampton states that the conveyor 23 serves to continuously agitate the bark particles to ensure complete and even chemical treatment in the vessel 12. This clearly states that the barks will be submerged due to action of agitation to ensure complete and even treatment. Complete and even treatment only can happened when the Barks are submerged in the solution to cover all surface of the barks. Furthermore, agitating will cause the barks to be submerged in the water. Note that all activities are performed

simultaneously in the vessel 12, so while the waste is being submerged by action of the conveyor 23 agitating it, the waste is also being transported on the conveyor 23 to the outlet of the vessel 12.

**Applicant argued that Rampton produces two totally different products because Rampton's process involves in complete separation of exogenous and endogenous bark particles.**

First, it is noted that the invention as claimed is a method of production and not a specific product produce from the method because from Applicant's disclosure, it appears that other sawmill waste can be employed in the method and not just pine bark waste. See paragraphs [0001][0002][0026]. The method itself can be used to produce another different product and not just only one special product, i.e. a product with at least partial separation between the endogenous bark and the exogenous bark. Thus, the method of production of Applicant is no different from that of Rampton because both methods can produce different products, so it is irrelevant if Rampton produces more than one products or not as long as the method of production is the same as Applicant.

Second, the language states "at least partial separation", which "complete separation" (as taught by Rampton) encompasses the "at least partial" limitation, especially with the open term "comprising", (see paragraph [0119]). Hence, if complete separation exists in Applicant's method of production, it would not hinder the invention because the invention is not a specific product produce by a specific method. The invention of Applicant is a general method of production of plant growth media from

sawmill waste, which waste can be a variety of different waste, to produce a variety of growth media as desired and not a specific plant growth media.

Third, Rampton never stated "complete" separation in his disclosure because this might be impossible because, just like any mechanical system, a miniscule proportion of endogenous and/or sapwood might still adhere to the exogenous bark. Unless Rampton specifically states that his system is 100% error proof, which it is unlikely, then it is a guarantee that the endogenous and sapwood completely separated from the exogenous. What if some exogenous barks do not float in vessel 19 because, as we all know, the barks can have various densities, thus, some might be lighter than others, depending on their decomposition rate. The lighter ones float in vessel 19 while the heavier ones (maybe a miniscule amount, but nevertheless, is an amount) sink to the bottom of the vessel 19 and get process together with the endogenous, which will result in a product that has partial separation of endogenous and exogenous barks, just like Applicant.

***Conclusion***

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Son T. Nguyen whose telephone number is 571-272-6889. The examiner can normally be reached on Mon-Thu from 10:00am to 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter M. Poon can be reached on 571-272-6891. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Son T. Nguyen/
Primary Examiner, Art Unit 3643